

IP21 Solar Inverters-EM Series

2.5 / 3.5 / 8.5 / 11KW 220V / 230Vac Output

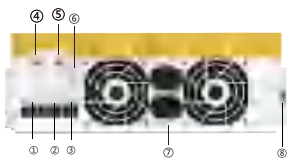
Features



- Lithium battery activation function by PV or Utility
- Compatible work with lifepo4 battery via RS485
- Pure sine wave
- Power factor 1.0
- PV input Voltage 60Vdc-500Vdc
- Built-in MPPT 60A / 100A/120A/160A
- Capable to work without battery
- Detachable dust cover for harsh environment
- WIFI remote monitoring optional
- Support multiple output priority: UTL, SOL, SBU, SUB
- EQ function to optimize battery performance and extend lifecycle

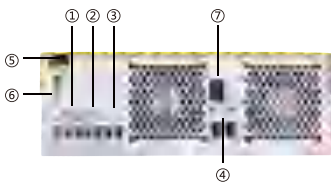


Bottom view



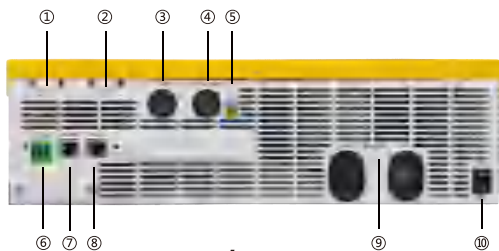
2.5KW

1. AC input
2. AC output
3. PV input
4. Battery input
5. Grounding
4. RS485 communication port
5. RS232 communication port
6. Grounding
7. Battery input
8. Power on/off switch



3.5KW

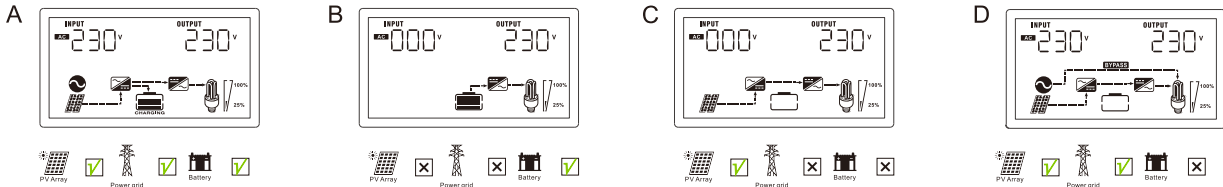
1. AC input
2. AC output
3. PV input
4. Battery input
5. RS232 / RS485 communication port
6. Grounding
7. Power on/off switch



8.5/11KW

1. Solar input - 1
2. Solar input - 2
3. AC input
4. AC output
5. Grounding
6. Dry contact
7. RS485 communication port
8. RS232 communication port
9. Battery input
10. Power on / off switch

Working Mode



Technical Data

MODEL	EM2500-12L	EM2500-24L	EM3500-24L	EM8500-48L	EM11000-48L
Capacity	2.5KVA/2.5KW	2.5KVA/2.5KW	3.5KVA/3.5KW	8.5KVA/8.5KW	11KVA/11KW
Parallel Capability	NO				
Lithium Battery activation	YES (By PV or Utility)	YES (By PV only)	YES (By PV or Utility)	YES (By PV or Utility)	YES (By PV or Utility)
Lithium Battery communication	YES(RS485)				
WIFI	Optional				
INPUT					
Nominal Voltage	230VAC				
Acceptable Voltage Range	170-280VAC(For personal Computer);90-280vac(For Home Appliances)				
Frequency	50/60 Hz(Auto sensing)				
OUTPUT					
Nominal Voltage	220/230VAC±5%				
Surge Power	5000VA	5000VA	7000VA	17000VA	22000VA
Frequency	50/60Hz				
Waveform	Pure Sine wave				
Transfer Time	10ms(For personal Computer);20ms(For Home Appliances)				
Peak Efficiency(PV to INV)	96%				
Peak Efficiency(Battery to INV)	93%				
Overload Protection	5s@>=140% load; 10s@110%~140% load				
Crest Factor	3:1				
Admissible Power Factor	0.6~1 (inductive or capacitive)				
BATTERY					
Battery Voltage	12VDC	24VDC	24VDC	48VDC	48VDC
Floating Charge Voltage	13.5VDC	27VDC	27VDC	54VDC	54VDC
OverCharge Protection	16VDC	32VDC	32VDC	63VDC	63VDC
Charging Method	CC / CV				
SOLAR CHARGER & AC CHARGER					
Solar Charger Type	MPPT				
Max.PV Array Power	3000W	3000W	4000W	5000W*2	5500W*2
Max.PV Array Open Circuit Voltage	500Vdc				
PV Array MPPT Voltage Range	50Vdc-500Vdc	60Vdc~500Vdc	60Vdc~500Vdc	60Vdc~500Vdc	60Vdc~500Vdc
Max.Solar Input Current	15A	15A	15A	18A*2	18A*2
Max.Solar Charge Current	120A	100A	100A	140A	160A
Max.AC Charge Current	120A	60A	80A	120A	120A
Max.Charge Current (PV+AC)	120A	100A	100A	140A	160A
PHYSICAL					
Dimensions,D x W x H(mm)	372x340x120.5	361.8x310x106	361.8x310x106	544.5x414.5x122.5	544.5x414.5x122.5
Package Dimensions,D x W x H(mm)	478x408x195	560x375x185	560x375x185	637x495x214	637x495x214
Net Weight(Kg)	6.9	6.0	6.2	14.4	14.8
Gross weight(Kgs)	7.85	6.7	6.9	15.65	16.05
Communication Interface	RS232+RS485		RS232+RS485+DRY CONTACT		
ENVIRONMENT					
Operating Temperature Range	(-10°C to 55°C)				
Storage Temperature	(-15°C ~ 60°C)				
Humidity	5% to 95% Relative Humidity (Non-condensing)				
Ingress Protection	IP21				

Product specifications are subject to change without further notice.